

**REMARKS**

Claims 1-5 are all the claims pending in the application. Applicants thank the Examiner for accepting the drawings. Applicants also thank the Examiner for acknowledging Applicants' claim for foreign priority and receipt of the certified priority document. Finally, Applicants thank the Examiner for considering the references in the June 24, 2004 and September 25, 2003 Information Disclosure Statements.

**Claim Objections**

Claims 1 and 5 were objected because of various informalities. Applicants have amended these claims in a non-limiting manner thought to address the Examiner's objections.

**Claim Rejections - 35 USC § 103**

Claims 1, 2 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lin (U.S. Patent No. 6,498,783) in view of Nederlof (U.S. Patent No. 5,590,118). Lin relates to a traffic monitoring system for TCP/IP data transmitted via cable television channels. Regarding claim 1, the Examiner acknowledges that the means for collecting empty band related information related to an empty band of each route existing between own router and a communication IP packet (as recited in claim 1) is not specifically disclosed in Lin.

However, the Examiner argues that Lin does disclose in column 2, lines 21-28, means for collecting information regarding the speed of various routes, which could be used to determine empty band related information. The Examiner also states that Nederlof discloses in column 8,

lines 10-11, means for collecting information related to available bandwidth. As such, the Examiner concludes that it would have been obvious to one skilled in the art at the time of the invention to collect empty band information.

Applicants respectfully traverse this rejection. Claim 1 recites, *inter alia*, “selecting a route having no overlapping used by another packet with higher precedence.” The Examiner states that this feature is disclosed by Lin at column 2, lines 40-52. The Examiner also states that if different classes of service are being offered, the precedence of the packets must be known and stored. However, Lin does not disclose the precedence feature as recited. First, Lin discloses that the assignment of a channel at a data service request is not disclosed in Lin, but rather U.S. Patent No. 5,675,732, and that as such, Lin discloses the apparatus and method for distributing data services (see col. 4, lines 23-30). As such, Lin does not teach route selection and precedence.

Next, in Lin, the users themselves select the bandwidth/route for transmission. This is granted unless there is not specific bandwidth available on that channel (see col. 5, lines 16-21). Thus, precedence of each packet is also not taught by Lin. Nederlof also does not disclose these features of route selection based on precedence. Rather, Nederlof is related to rerouting a data stream previously routed through a switching network that has failed. The failure of a switching network would not suggest the precedence feature of the present invention. Thus claim 1 (as well as claim 5 which includes these features) is allowable.

Claim 2 recites “wherein said empty band related information is return times of dummy packets.” The Examiner states that this feature is disclosed by Lin, column 2, lines 21-28 (the

test message is a dummy packet). However, Lin does not disclose or suggest *return times* of dummy packets as claimed. In the present invention, dummy packets and return dummy packets are used. In Lin, a timestamp is placed on the test message by the bandwidth manager, and compared to the time that the test message is received by the personal computer (see column 2, lines 21-28). There is no suggestion of a return dummy packet, nor therefore, return times of dummy packets. As such, claim 2 is allowable for this feature as well as its dependence on claim 1.

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lin in view of Nederlof. Claim 3, inter alia, recites use of a dummy packet and a return dummy packet. The Examiner states that Lin discloses in column 1, lines 26-28 and 35-39, using return dummy packets as a common method of estimating round-trip time in IP networks. Applicants respectfully submit that return dummy packets are not disclosed in Lin for the reasons presented above for claim 2. Claim 3 also recites the "precedence" feature which is neither disclosed nor suggested for the reasons above. Accordingly, claim 3 is allowable based on these features, as well as its dependence on claim 1.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lin in view of Nederlof and in further view of Bellovin et al. (U.S. Patent No. 5,870,557). The Examiner acknowledges that the claimed dummy packet generating portion transmitting the dummy packets at each time when a predetermined number of communication IP packets is received from a terminal directly connected to own router is not specifically disclosed in Lin or Nederlof.

However, the Examiner states that Bellovin discloses in column 2, lines 8-10, periodically analyzing the congestion along routes in an IP network. As such, the Examiner concludes that it would have been obvious to one skilled in the art at the time of the invention to transmit the dummy packet and collect congestion information after every N packets. The Examiner states that the motivation would be to be able to identify and adjust to traffic changes in the network as they happen over time.

Applicants respectfully submit that claim 4 is allowable at least based on its dependence on claims 1/3, allowable for the reasons described above.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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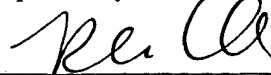
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